

Having described the invention, we claim:

1. An air supply module for use in a vehicle air system, said module including:
  - a reservoir having at least three chambers that are separated internally by a plurality of imperforate baffles; and
  - a mounting system on the reservoir for installing and supporting the reservoir on the vehicle.
2. A module as set forth in claim 1 wherein said at least three chambers include a primary service reservoir for supplying compressed air to a primary side of a braking system of the vehicle and a secondary service reservoir for supplying compressed air to a secondary side of the braking system of the vehicle, and said at least three chambers of said reservoir are sufficient to supply all the air needed by the components of the vehicle air system.
3. A module as set forth in claim 2 wherein said reservoir further includes a purge volume and an air dryer.
4. A module as set forth in claim 1 further including at least one air line supported on the outside of said reservoir for directing compressed air between said first chamber and said second chamber and said third chamber.
5. A module as set forth in claim 4 wherein said mounting assembly comprises a bracket having a support surface, and a bracket liner received on said bracket between said support surface and the outer side surface of the reservoir.
6. A module as set forth in claim 5 wherein said bracket liner has end portions that engage said bracket and hold said bracket liner on said bracket without fasteners.

7. A module for use in a vehicle air supply system, said module including:  
a reservoir having at least three chambers; and  
a mounting assembly for supporting the reservoir on the vehicle, said mounting assembly comprising a bracket having a support surface and a bracket liner received on said bracket between said support surface and the outer side surface of the reservoir.
8. A module as set forth in claim 7 wherein said bracket liner has end portions that engage said bracket and hold said bracket liner on said bracket without fasteners.
9. Apparatus as set forth in claim 7 wherein said support surface of said bracket is a curved edge surface and said bracket liner is wider than said edge surface, said bracket liner has end portions for engaging said bracket and holding said bracket liner on said bracket, said bracket liner when in a free state has a curved, three-dimensional configuration and the engagement of said liner end portions with said bracket and said curved, three-dimensional configuration of said liner hold said liner in place on said bracket without fasteners,
10. Apparatus as set forth in claim 9 wherein said bracket liner when in its free condition is slightly flatter than said arcuate edge surface and when assembled on said bracket attempts to regain its free condition thereby pressing against said edge surface to help hold said liner in place on said bracket.
11. A module as set forth in claim 7 further including at least one air line supported on the outside of said reservoir for directing compressed air between said first chamber and said second chamber and said third chamber.
12. A module as set forth in claim 7 wherein said reservoir comprises a plurality of imperforate baffles in said reservoir separating said first and second and third

chambers to block fluid flow between said first and second and third chambers within said reservoir.

13. A vehicle air braking system comprising:  
an air compressor;  
an air dryer;  
a reservoir for receiving and storing air from said air dryer, said reservoir having at least three chambers that are separated internally by a plurality of imperforate baffles; and  
a plurality of brake chambers for receiving stored compressed air from said reservoir and for actuating vehicle brakes.

14. A system as set forth in claim 13 further including at least one air line supported on the outside of said reservoir for directing compressed air between said first chamber and said second chamber and said third chamber.

15. A system as set forth in claim 14 wherein said air line directs compressed air from said first chamber to said second chamber and from said first chamber to said third chamber.

16. A system as set forth in claim 13 further comprising a mounting assembly for supporting the reservoir on the vehicle, said mounting assembly including a bracket having a support surface and a bracket liner received on said bracket between said support surface and the outer side surface of the reservoir.

17. A system as set forth in claim 16 wherein said support surface of said bracket is a curved edge surface and said bracket liner is wider than said edge surface, said bracket liner has end portions for engaging said bracket and holding said bracket liner on said bracket, said bracket liner when in a free state has a curved, three-dimensional configuration and the engagement of said liner end portions with said

bracket and said curved, three-dimensional configuration of said liner hold said liner in place on said bracket without fasteners.

18. Apparatus as set forth in claim 16 wherein said bracket liner when in its free condition is slightly flatter than said support on said bracket and when assembled on said bracket attempts to regain its free condition thereby pressing against said support surface to help hold said liner in place on said bracket.

19. A reservoir for a vehicle air braking system, comprising:  
a first chamber for storing compressed air;  
a second chamber for storing compressed air;  
a third chamber for storing compressed air; and  
a plurality of imperforate baffles in said reservoir separating said first and second and third chambers to block fluid flow between said first and second and third chambers within said reservoir.

20. A reservoir as set forth in claim 19 further including at least one air line supported on the outside of said reservoir for directing compressed air between said first chamber and said second chamber and said third chamber.

21. A reservoir as set forth in claim 19 wherein said first chamber is a supply chamber for receiving compressed air, said second chamber is a first service chamber for receiving compressed air from the first chamber, and said third chamber is a second service chamber for receiving compressed air from the first chamber, and wherein said air line directs compressed air from said first chamber to said second chamber and from said first chamber to said third chamber.

22. A reservoir as set forth in claim 19 including a purge chamber for receiving compressed air from an air dryer.

23. A reservoir assembly as set forth in claim 22 further including an air dryer supported on said reservoir and means for defining a path for compressed air to flow between said air dryer and said purge chamber and said supply chamber.

24. A reservoir for a vehicle air braking system, comprising:  
a first chamber for receiving compressed air;  
a second chamber for receiving compressed air from the first chamber;  
a third chamber for receiving compressed air from the first chamber; and  
at least one air line external to said reservoir and supported on said reservoir for providing air flow paths between said first chamber and said second chamber and said third chamber.

25. A reservoir as set forth in claim 24 wherein said air line directs compressed air from said first chamber to said second chamber and from said first chamber to said third chamber.

26. A reservoir as set forth in claim 24 comprising a plurality of imperforate baffles in said reservoir separating said first and second and third chambers to block fluid flow between said first and second and third chambers within said reservoir.

27. A reservoir as set forth in claim 24 further comprising at least one fitting on said first chamber for supplying or providing air for accessory systems on the vehicle.

28. A reservoir as set forth in claim 24 further comprising:  
a first fitting on said reservoir for directing compressed air from said first chamber to said air line at a location outside of said first chamber;  
a second fitting on said reservoir at a location outside of said second chamber for directing compressed air from said air line into said second chamber; and  
a third fitting on said reservoir at a location outside of said third chamber for directing compressed air from said air line into said third chamber.

29. A reservoir as set forth in claim 28 wherein said at least three chambers include a primary service reservoir for supplying compressed air to a primary side of a braking system of the vehicle and a secondary service reservoir for supplying compressed air to a secondary side of the braking system of the vehicle.

30. A reservoir as set forth in claim 28 wherein said second fitting includes a tee for directing air along said air line from said first chamber past said second chamber to said third chamber.

31. A reservoir as set forth in claim 30 including a purge volume for receiving compressed air from an air dryer.

32. A reservoir assembly as set forth in claim 31 further including an air dryer supported on said reservoir and means for defining a path for compressed air to flow between said air dryer and said purge chamber and said supply chamber.

33. A reservoir as set forth in claim 30 further comprising at least one fitting on said first chamber for supplying or providing air for accessory systems on the vehicle.

34. Apparatus for supporting a reservoir having an outer side surface, comprising:  
a bracket having a support surface; and  
a bracket liner received on said bracket between said support surface and the outer side surface of the reservoir.

35. Apparatus as set forth in claim 34 further comprising a member having opposite ends connected with said bracket and an intermediate portion wrapping at least partially around the reservoir and engaging the outer side surface of the reservoir

36. Apparatus as set forth in claim 34 wherein said support surface of said bracket is a curved edge surface and said bracket liner is wider than said edge surface.

37. Apparatus as set forth in claim 36 wherein said curved edge surface of said bracket is about one quarter inch wide and said bracket liner is about three quarters of an inch wide.

38. Apparatus as set forth in claim 37 wherein said bracket liner has end portions that engage said bracket and hold said bracket liner on said bracket without fasteners.

39. Apparatus as set forth in claim 38 wherein said bracket liner end portions have notches that engage shoulders on said bracket to hold said bracket liner on said bracket.

40. Apparatus as set forth in claim 34 wherein said support surface of said bracket is a curved edge surface and said bracket liner is wider than said edge surface, said bracket liner being a strap having notched end portions for engaging said bracket and holding said bracket liner on said bracket without fasteners.

41. Apparatus as set forth in claim 34 wherein said support surface of said bracket is a curved edge surface and said bracket liner is wider than said edge surface, said bracket liner has end portions for engaging said bracket and holding said bracket liner on said bracket, said bracket liner when in a free state has a curved, three-dimensional configuration and the engagement of said liner end portions with said bracket and said curved, three-dimensional configuration of said liner hold said liner in place on said bracket without fasteners,

42. Apparatus as set forth in claim 41 wherein said bracket liner end portions have notches that engage shoulders on said bracket to help position and help retain said bracket liner on said bracket, the outer side surface of the reservoir has a cylindrical configuration, said curved edge surface has a radius of curvature slightly greater than the radius of curvature of the outer side surface of the reservoir, and said bracket liner when

received on said bracket has a radius of curvature substantially equal to the radius of curvature of the outer side surface of the reservoir.

43. Apparatus as set forth in claim 34 wherein said bracket liner when in its free condition is slightly flatter than said support surface of said bracket and when assembled on said bracket attempts to regain its free condition thereby pressing against said support surface to help hold said liner in place on said bracket.